

# A note on how to prepare insect genitalia without loss of stomach contents for pollen analytical research

by

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The genital apparatus of insects may provide important specific characters. For that reason many preparations are usually made, in the process of which the abdomen is often entirely detached. The non-chitinous parts are then removed and thrown away, or form a part of the surrounding tissue which is macerated in a potassium-hydroxide solution. The contents of the abdomen, however, include the (former) digestive tube, with its food remains. In anthophilous insects the digestive tube may contain many pollen grains, which in dried condition may be scattered throughout the abdomen. Even when the insects have been completely dried, clear slides can be obtained by acetolysis of the abdominal contents. Many perfect pollen grains can be found in insects (e.g. Coleoptera, Cetoniidae) collected more than a century ago. Also when the contents of the abdomen are mouldered to dust, successful pollen analysis is possible.

It is recommended to preserve the non-chitinous contents of the abdomen of anthophilous insects so as to maintain the possibility of later pollen analysis. Before relaxing the genital capsule the soft parts should be removed as much as possible in the dried condition. After potassium-hydroxide treatment subsequent pollen analysis is impossible, because certain kinds of pollen may be destroyed (BROWN, 1960). In small envelopes (e.g. those used for stamps) the samples can be kept for a long time. The envelopes can be attached to the pins of the insects.

**N e d e r l a n d s e s a m e n v a t t i n g .** — De inhoud van het abdomen van stuifmeel-etende insekten moet bij het maken van genitaalpreparaten bewaard worden, omdat pollenanalyse hierop zeer goed mogelijk is, zelfs al staan de insekten al zeer lang in de collectie. De monsters kunnen uitstekend bewaard worden in kleine (postzegel-)zakjes.

## Reference

BROWN, C. A., 1960. Palynological techniques. Baton Rouge La. vi, 1—188.

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Atlas provisoire des Insectes de Belgique, édité par Jean Leclercq. Cartes 601 à 700. Faculté des Sciences agronomiques de l'état, Zoologie Générale et Faunistique, Gembloux, 1972.

Dit maal is het grootste deel van de kaarten gewijd aan de Hymenoptera Apoidea Andrenidae (nr. 601—680). Samensteller ervan is Prof. J. LECLERCQ. Kaart 681 geeft een overzicht van alle vakken waaruit vindplaatsen van deze insekten bekend zijn (samensteller Ch. WONVILLE).

Op de nummers 682 en 683 zijn de vindplaatsen verwerkt van de twee Belgische Xylocopidae (*Ceratina cyanea* en *Xylocopa violacea*), weer door Prof. LECLERCQ.

De laatste 17 kaarten bevatten de faunistische gegevens over Syrphiden uit de geslachten *Volucella* en *Xylota* en werden samengesteld door M. LECLERCQ. — LPK.